E000P-971095-00
Date: 08/24/98

MODIFICATION REVIEW

For

BEAMLINE
PERSONNEL SAFETY SYSTEM

ARGONNE NATIONAL LABORATORY
ADVANCED PHOTON SOURCE
EXPERIMENTAL FACILITIES

E000P-971095-00

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PSS Change Request
24 August 1998

1. PSS Change

   Chain A:

   Chain A will be modified to implement an interlock between the pneumatic door open and the shutter open functions.

   Chain B:

   Chain B is not affected as the code in the Chains operates independently.

2. Reasons for the PSS Change.

   Currently there is an interlock between the door closed sensors and the shutter open push button. The door opens much slower than the shutter and a window of opportunity exists where the door open function has been initiated but the door has not moved off the door closed sensors. If during this interval the shutter open push button is pressed the shutter will be allowed to open. When the door eventually moves off the door closed sensors the PSS system generates a major fault. Operational experience has shown this type of nuisance fault can and will be generated. By changing the PSS Chain A interlock as described in section 1.0 above, the nuisance fault can be eliminated and also enhance the safe operation of the system.

3. Extent of the PSS Change

   This change will affect all Chain A Beamline code written or modified on or after 07 December 1998.

4. Method of Implementation

   The changes will be applied using the existing Software Change Request mechanism as defined in the Software Configuration Management Procedures document E000P-921130 most current version for the Interlock Systems and Instrumentation Group.